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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/811,889	03/30/2004	Hul-Chun Hsu	OP-093000005 1319	
7590 02/25/2005			EXAMINER	
Yi-Wen Tseng 4331 Stevens Battle Lane Fairfax, VA 22033			MCKINNON, TERRELL L	
			ART UNIT	PAPER NUMBER
			3743	

DATE MAILED: 02/25/2005.

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)			
	10/811,889	HSU, HUL-CHUN			
Office Action Summary	Examiner	Art Unit			
	Terrell L Mckinnon	3743			
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply					
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).					
Status					
1) Responsive to communication(s) filed on 30	March 2004.				
2a) This action is <b>FINAL</b> . 2b) ⊠ Th	nis action is non-final.				
	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.				
Disposition of Claims					
4) Claim(s) 1-7 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration.  5) Claim(s) is/are allowed.  6) Claim(s) 1-7 is/are rejected.  7) Claim(s) is/are objected to.  8) Claim(s) are subject to restriction and/or election requirement.					
Application Papers					
9)☐ The specification is objected to by the Exami	ner.				
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.					
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).					
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.					
Priority under 35 U.S.C. § 119					
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No.</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>					
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	4) Interview Summary Paper No(s)/Mail Da	ite			
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  Paper No(s)/Mail Date  5) Notice of Informal Patent Application (PTO-152)  6) Other:					

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## **DETAILED ACTION**

## Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cornelison et al. (U.S. 2,958,021) in view of Tajima (U.S. 5,632,158).

Cornelison discloses a cooling arrangement for electrical devices comprising:

- a pipe member having two opposing open ends;
- a lid closely covered on one open end;
- a base having an interlocking member with a flange fitly embracing
  the pipe member to receive the other open end of the pipe member
  therein, wherein a thickness of the flange is not larger than a
  thickness of pipe member at the open end received in the
  interlocking member;
- the pipe member is a cylindrical pipe, the lid includes a filling tube
   mounted thereon for working fluid to be filled in the pipe member;
- the pipe member is sealed with a sealing structure on the filling tube;
- the base includes a flat surface opposite to the inside surface for contact with a heat source; and

- an annular slot is extended outwardly to the whole base.

Cornelison's invention discloses all of the claimed limitations from above except for a wick structure attached on an inner wall of the pipe member and an inside surface of the base.

However, Tajima teaches a wick structure attached on an inner wall of the pipe member and an inside surface of the base.

Given the teachings of Tajima, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the cooling arrangement of Cornelison with a wick structure attached on an inner wall of the pipe member and an inside surface of the base.

Doing so would provide enhance thermal conduction and dissipation of the cooling arrangement.

## Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following references cited on the USPTO 892 discloses related limitations of the applicant's claimed and disclosed invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Terrell L Mckinnon whose telephone number is 571-272-4797. The examiner can normally be reached on Monday -Thursday and every other Friday.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Henry Bennett can be reached on 571-272-4791. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Terrell L Mckinnon Primary Examiner Art Unit 3743 February 22, 2005